

Appendix E

Biological Database Searches



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825



November 21, 2011

Document Number: 111121021740

Subject: Not specified

Dear: Interested party

We are sending this official species list in response to your November 21, 2011 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be February 19, 2012.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division



U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office

**Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested**

Document Number: 111121022104

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

- Euphydryas editha bayensis*
Critical habitat, bay checkerspot butterfly (X)
- Haliotes cracherodii*
black abalone (E) (NMFS)
- Haliotes sorenseni*
white abalone (E) (NMFS)
- Icaricia icarioides missionensis*
mission blue butterfly (E)
- Speyeria callippe callippe*
callippe silverspot butterfly (E)
- Speyeria zerene myrtleae*
Myrtle's silverspot butterfly (E)

Fish

- Acipenser medirostris*
green sturgeon (T) (NMFS)
- Eucyclogobius newberryi*
tidewater goby (E)
- Hypomesus transpacificus*
delta smelt (T)
- Oncorhynchus kisutch*
coho salmon - central CA coast (E) (NMFS)
- Oncorhynchus mykiss*
Central California Coastal steelhead (T) (NMFS)
Central Valley steelhead (T) (NMFS)
- Oncorhynchus tshawytscha*
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Rana draytonii*
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

- Caretta caretta*
loggerhead turtle (T) (NMFS)
- Chelonia mydas (incl. agassizi)*
green turtle (T) (NMFS)

Dermochelys coriacea
leatherback turtle (E) (NMFS)
Lepidochelys olivacea
olive (=Pacific) ridley sea turtle (T) (NMFS)
Thamnophis sirtalis tetrataenia
San Francisco garter snake (E)

Birds

Brachyramphus marmoratus
marbled murrelet (T)
Charadrius alexandrinus nivosus
western snowy plover (T)
Diomedea albatrus
short-tailed albatross (E)
Pelecanus occidentalis californicus
California brown pelican (E)
Rallus longirostris obsoletus
California clapper rail (E)
Sternula antillarum (=Sterna, =albifrons) browni
California least tern (E)

Mammals

Arctocephalus townsendi
Guadalupe fur seal (T) (NMFS)
Balaenoptera borealis
sei whale (E) (NMFS)
Balaenoptera musculus
blue whale (E) (NMFS)
Balaenoptera physalus
finback (=fin) whale (E) (NMFS)
Enhydra lutris nereis
southern sea otter (T)
Eubalaena (=Balaena) glacialis
right whale (E) (NMFS)
Eumetopias jubatus
Steller (=northern) sea-lion (T) (NMFS)
Physeter catodon (=macrocephalus)
sperm whale (E) (NMFS)
Reithrodontomys raviventris
salt marsh harvest mouse (E)

Plants

Lessingia germanorum
San Francisco lessingia (E)

Proposed Species

Amphibians

Rana draytonii
Critical habitat, California red-legged frog (PX)

Quads Containing Listed, Proposed or Candidate Species:

SAN FRANCISCO SOUTH (448B)

County Lists

No county species lists requested.

Key:

- (E) *Endangered* - Listed as being in danger of extinction.
- (T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Oceanic & Atmospheric Administration Fisheries Service](#). Consult with them directly about these species.
- Critical Habitat* - Area essential to the conservation of a species.
- (PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
- (C) *Candidate* - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our [Protocol](#) and [Recovery Permits](#) pages.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm,

pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [Map Room](#) page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts.

[More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be February 19, 2012.



Selected Elements by Scientific Name
California Department of Fish and Game
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	PDBOR01070	None	None	G2?	S2	1B.2
<i>Arctostaphylos franciscana</i> Franciscan manzanita	PDERI040J3	None	None	G1	S1	1B.1
<i>Arctostaphylos imbricata</i> San Bruno Mountain manzanita	PDERI040L0	None	Endangered	G1	S1	1B.1
<i>Arctostaphylos montana ssp. ravenii</i> Presidio manzanita	PDERI040J2	Endangered	Endangered	G3T1	S1	1B.1
<i>Arctostaphylos montaraensis</i> Montara manzanita	PDERI042W0	None	None	G2	S2.2	1B.2
<i>Arctostaphylos pacifica</i> Pacific manzanita	PDERI040Z0	None	Endangered	G1	S1	1B.2
<i>Astragalus tener var. tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T2	S2	1B.2
<i>Banksula incredula</i> incredible harvestman	ILARA14100	None	None	G1	S1	
<i>Caecidotea tomalensis</i> Tomales isopod	ICMAL01220	None	None	G2	S2	
<i>Callophrys mossii bayensis</i> San Bruno elfin butterfly	IILEPE2202	Endangered	None	G4T1	S1	
<i>Carex comosa</i> bristly sedge	PMCYP032Y0	None	None	G5	S2?	2.1
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G4T3	S2	SSC
<i>Chorizanthe cuspidata var. cuspidata</i> San Francisco Bay spineflower	PDPGN04081	None	None	G2T2	S2.2	1B.2
<i>Chorizanthe robusta var. robusta</i> robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1.1	1B.1
<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle	IICOL02101	None	None	G5T2	S1	
<i>Cirsium andrewsii</i> Franciscan thistle	PDAST2E050	None	None	G2	S2.2	1B.2
<i>Cirsium occidentale var. compactum</i> compact cobwebby thistle	PDAST2E1Z1	None	None	G3G4T2	S2.1	1B.2
<i>Collinsia multicolor</i> San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2.2	1B.2
<i>Dufourea stagei</i> Stage's dufourine bee	IIHYM22010	None	None	G1?	S1?	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eucyclogobius newberryi</i> tidewater goby	AFCQN04010	Endangered	None	G3	S2S3	SSC



Selected Elements by Scientific Name

California Department of Fish and Game

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	IILEPK4055	Threatened	None	G5T1	S1	
<i>Fritillaria liliacea</i> fragrant fritillary	PMLIL0V0C0	None	None	G2	S2.2	1B.2
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T2	S2	SSC
<i>Gilia capitata ssp. chamissonis</i> blue coast gilia	PDPLM040B3	None	None	G5T2	S2.1	1B.1
<i>Grindelia hirsutula var. maritima</i> San Francisco gumplant	PDAST470D3	None	None	G5T2	S2.1	1B.2
<i>Helianthella castanea</i> Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
<i>Hemizonia congesta ssp. congesta</i> seaside tarplant	PDAST4R065	None	None	G5T2T3	S2S3	1B.2
<i>Hesperevax sparsiflora var. brevifolia</i> short-leaved evax	PDASTE5011	None	None	G4T2T3	S2S3	1B.2
<i>Horkelia cuneata ssp. sericea</i> Kellogg's horkelia	PDR0S0W043	None	None	G4T1	S1.1	1B.1
<i>Hydroporus leechi</i> Leech's skyline diving beetle	IICOL55040	None	None	G1?	S1?	
<i>Ischnura gemina</i> San Francisco forktail damselfly	IIOD072010	None	None	G2	S2	
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4?	
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G4T1	S1	FP
<i>Layia carnosa</i> beach layia	PDAST5N010	Endangered	Endangered	G2	S2.1	1B.1
<i>Leptosiphon rosaceus</i> rose leptosiphon	PDPLM09180	None	None	G1	S1.1	1B.1
<i>Lessingia germanorum</i> San Francisco lessingia	PDAST5S010	Endangered	Endangered	G1	S1.1	1B.1
<i>Lichnanthe ursina</i> bumblebee scarab beetle	IICOL67020	None	None	G2	S2	
<i>Malacothamnus arcuatus</i> arcuate bush-mallow	PDMAL0Q0E0	None	None	G2Q	S2.2	1B.2
<i>Melospiza melodia pusillula</i> Alameda song sparrow	ABPBXA301S	None	None	G5T2?	S2?	SSC
<i>Mylopharodon conocephalus</i> hardhead	AFCJB25010	None	None	G3	S3	SSC
<i>Pentachaeta bellidiflora</i> white-rayed pentachaeta	PDAST6X030	Endangered	Endangered	G1	S1.1	1B.1



Selected Elements by Scientific Name

California Department of Fish and Game

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020	None	None	G5	S3	WL
<i>Plebejus icarioides missionensis</i> Mission blue butterfly	IILEPG801A	Endangered	None	G5T1	S1	
<i>Rallus longirostris obsoletus</i> California clapper rail	ABNME05016	Endangered	Endangered	G5T1	S1	FP
<i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened	None	G4T2T3	S2S3	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2S3	
<i>Sanicula maritima</i> adobe sanicle	PDAPI1Z0D0	None	Rare	G2	S2.2	1B.1
<i>Silene verecunda ssp. verecunda</i> San Francisco campion	PDCAR0U213	None	None	G5T2	S2.2	1B.2
<i>Speyeria callippe callippe</i> callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
<i>Suaeda californica</i> California seablite	PDCHE0P020	Endangered	None	G1	S1.1	1B.1
<i>Thamnophis sirtalis tetrataenia</i> San Francisco garter snake	ARADB3613B	Endangered	Endangered	G5T2	S2	FP
<i>Trachusa gummifera</i> A leaf-cutter bee	IIHYM80010	None	None	G1	S1	
<i>Triphysaria floribunda</i> San Francisco owl's-clover	PDSCR2T010	None	None	G2	S2.2	1B.2
<i>Triquetrella californica</i> coastal triquetrella	NBMUS7S010	None	None	G1	S1	1B.2
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2G3	S2S3	

Record Count: 56

